

Name: \_\_\_\_\_

Date: \_\_\_\_\_

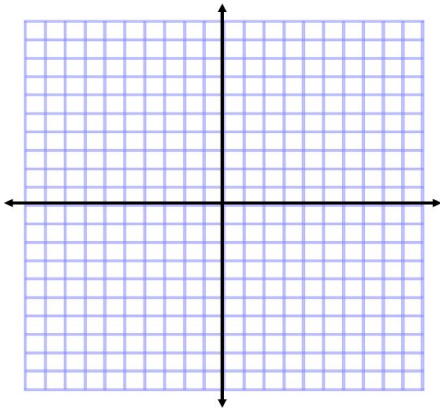
## Solving Quadratic Equations by Graphing

### Part One: Check for Understanding:

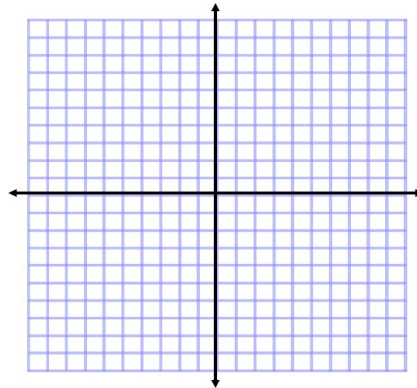
1. The solutions to quadratic equations are also called \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
2. A quadratic equation has NO solution when the parabola does NOT intersect the \_\_\_\_-axis.
3. A quadratic equation whose parabola's vertex is at  $(0, 0)$  has (one, two) solution(s).
4. The graph of  $y = 3x^2$  is ( narrower, wider ) than the graph of  $y = -5x^2$ .
5. The vertex of  $y = 9x^2 + 3$  is a (maximum, minimum).

### Part Two: Solve each quadratic equation by SKETCHING THE GRAPH of the related quadratic function. *NOTE: You may have to ISOLATE ZERO before you graph.*

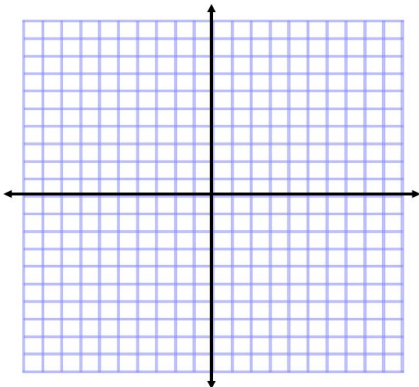
6.  $x^2 = 0$



7.  $-x^2 - 2 = 0$



8.  $-8x^2 = 16$



9.  $x^2 = -5$

